

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/010169

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C01B3/38

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C01B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00/00426 A (SCHADDENHORST DAVID ;SCHOONEBEEK RONALD JAN (NL); SHELL INT RESEAR) 6 January 2000 (2000-01-06) cited in the application page 7, line 19 - line 24; claims	1,4-6
Y	-----	2,3
X	WO 99/19249 A (PIETERSE COEN WILLEM JOHANNES ;JONG KRIJN PIETER DE (NL); SCHOONEB) 22 April 1999 (1999-04-22) page 5, line 5 - line 12; claims	1,4-6
Y	-----	2,3
Y	US 4 394 137 A (BRENT ALBERT ET AL) 19 July 1983 (1983-07-19) column 12, line 20 - column 13, line 4; claims	2,3

	-/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

21 February 2005

Date of mailing of the international search report

07/03/2005

Name and mailing address of the ISA
European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Zalm, W

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/010169

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 744 067 A (JAHNKE FREDERICK CHARLES) 28 April 1998 (1998-04-28) the whole document -----	1-6
A	US 6 447 745 B1 (BERLOWITZ PAUL JOSEPH ET AL) 10 September 2002 (2002-09-10) column 12, line 18 - line 22; claims -----	1-6
A	US 2003/122266 A1 (BAREIS MARC ET AL) 3 July 2003 (2003-07-03) paragraph '0020!; claims; tables -----	1
A	EP 0 892 760 A (SNAM PROGETTI) 27 January 1999 (1999-01-27) cited in the application -----	

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/010169

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0000426	A	06-01-2000	AT 222214 T	15-08-2002
			AT 232836 T	15-03-2003
			AU 746783 B2	02-05-2002
			AU 4776299 A	17-01-2000
			AU 743727 B2	31-01-2002
			AU 4777699 A	17-01-2000
			BR 9911654 A	20-03-2001
			BR 9911739 A	03-04-2001
			CA 2335970 A1	06-01-2000
			CA 2335983 A1	06-01-2000
			CN 1307538 T	08-08-2001
			CN 1307539 T	08-08-2001
			CZ 20004900 A3	15-08-2001
			DE 69902547 D1	19-09-2002
			DE 69902547 T2	22-05-2003
			DE 69905467 D1	27-03-2003
			DE 69905467 T2	11-09-2003
			DK 1098840 T3	09-12-2002
			WO 0000425 A1	06-01-2000
			WO 0000426 A1	06-01-2000
			EP 1098840 A1	16-05-2001
			EP 1093439 A1	25-04-2001
			ES 2182544 T3	01-03-2003
			ID 28037 A	03-05-2001
			ID 27777 A	26-04-2001
			JP 2002519181 T	02-07-2002
			JP 2002519182 T	02-07-2002
			NO 20006579 A	21-12-2000
			NO 20006580 A	21-12-2000
			PL 345181 A1	03-12-2001
			PL 345190 A1	03-12-2001
			PT 1098840 T	29-11-2002
			US 2004228792 A1	18-11-2004
			US 6702960 B1	09-03-2004
			ZA 200100316 A	29-08-2001
			ZA 200100317 A	23-07-2001
WO 9919249	A	22-04-1999	AT 231102 T	15-02-2003
			AU 737880 B2	06-09-2001
			AU 1335199 A	03-05-1999
			BR 9813035 A	15-08-2000
			CA 2306938 A1	22-04-1999
			CN 1275961 T	06-12-2000
			DE 69810805 D1	20-02-2003
			DE 69810805 T2	11-12-2003
			WO 9919249 A1	22-04-1999
			EP 1025039 A1	09-08-2000
			ID 24366 A	13-07-2000
			JP 2001519311 T	23-10-2001
			NO 20001927 A	13-04-2000
			PL 339812 A1	02-01-2001
			TW 440541 B	16-06-2001
			US 6673270 B1	06-01-2004
			ZA 9809263 A	16-04-1999
US 4394137	A	19-07-1983	US 4371378 A	01-02-1983
			AU 549751 B2	13-02-1986
			AU 8469682 A	16-12-1982

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/010169

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4394137	A	CA 1172044 A1	07-08-1984
		DE 3220546 A1	27-01-1983
		FR 2507615 A1	17-12-1982
		GB 2099843 A ,B	15-12-1982
		IT 1151794 B	24-12-1986
		NL 8202327 A	03-01-1983
		NZ 200759 A	09-11-1984
		US 4490156 A	25-12-1984
		CA 1162046 A1	14-02-1984
		DE 3047734 A1	08-10-1981
		US 4400180 A	23-08-1983
		US 4371379 A	01-02-1983
US 5744067	A	28-04-1998	
		US 5358696 A	25-10-1994
		AU 680070 B2	17-07-1997
		AU 1040695 A	19-06-1995
		BR 9408247 A	27-05-1997
		CA 2177176 A1	08-06-1995
		CN 1136800 A	27-11-1996
		EP 0731773 A1	18-09-1996
		FI 962218 A	11-07-1996
		HU 75978 A2	28-05-1997
		JP 9502694 T	18-03-1997
		NO 962260 A	04-07-1996
		NZ 276225 A	25-09-1996
		PL 314726 A1	16-09-1996
		SK 70496 A3	09-04-1997
		WO 9515290 A1	08-06-1995
US 6447745	B1	10-09-2002	
		AU 8299601 A	04-03-2002
		CA 2415833 A1	28-02-2002
		EP 1322549 A2	02-07-2003
		JP 2004506583 T	04-03-2004
US 2003122266	A1	03-07-2003	
		WO 0216259 A2	28-02-2002
		DE 10002004 A1	09-08-2001
		WO 0154219 A1	26-07-2001
EP 0892760	A	27-01-1999	
		DE 50101908 D1	13-05-2004
		EP 1252679 A1	30-10-2002
		IT MI960690 A1	13-10-1997
		AU 2384597 A	29-10-1997
		DE 69702190 D1	06-07-2000
		DE 69702190 T2	14-12-2000
		DK 892760 T3	21-08-2000
		EP 0892760 A1	27-01-1999
		NO 984735 A	08-12-1998
		WO 9737929 A1	16-10-1997
		RU 2175636 C2	10-11-2001